

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously presented): A method for producing a radical polymer, comprising feeding a radical polymerization initiator and a radical-polymerizable monomer into a reaction tube having an inner diameter of 2 mm or less and performing polymerization in the reaction tube in a homogeneous liquid state under flow conditions.

Claim 2 (Previously presented): The method for producing a radical polymer according to claim 1, wherein the radical polymerization initiator and the radical-polymerizable monomer are mixed before being fed into the reaction tube, and the mixture is fed to the reaction tube.

Claim 3 (Previously presented): The method for producing a radical polymer according to claim 1, wherein the reaction tube has an inner diameter of 1 mm or less.

Claim 4 (Previously presented): The method for producing a radical polymer according to claim 1, wherein the reaction tube has a plurality of reaction zones capable of regulating polymerization temperature, and the reaction zones are regulated in terms of temperature, whereby the molecular weight distribution of the formed polymer is controlled.

Claim 5 (Previously presented): The method for producing a radical polymer according to claim 4, wherein the reaction tube has a first reaction zone located on a radical polymerization initiator and radical-polymerizable monomer inlet side, and a second reaction zone located on a polymer liquid outlet side; the first reaction zone is maintained at a temperature at which the radical polymerization initiator decomposes; and the second

reaction zone is maintained at a temperature at which virtually no decomposition of the radical polymerization initiator occurs within the time during which the initiator passes through the second reaction zone.

Claims 6-8 (Canceled).

Claim 9 (Previously presented): The method for producing a radical polymer according to claim 2, wherein the reaction tube has an inner diameter of 1 mm or less.

Claim 10 (Previously presented): The method for producing a radical polymer according to claim 2, wherein the reaction tube has a plurality of reaction zones capable of regulating polymerization temperature, and the reaction zones are regulated in terms of temperature, whereby the molecular weight distribution of the formed polymer is controlled.

Claim 11 (Previously presented): The method for producing a radical polymer according to claim 3, wherein the reaction tube has a plurality of reaction zones capable of regulating polymerization temperature, and the reaction zones are regulated in terms of temperature, whereby the molecular weight distribution of the formed polymer is controlled.

Claim 12 (Previously presented): The method for producing a radical polymer according to claim 10, wherein the reaction tube has a first reaction zone located on a radical polymerization initiator and radical-polymerizable monomer inlet side, and a second reaction zone located on a polymer liquid outlet side; the first reaction zone is maintained at a temperature at which the radical polymerization initiator decomposes; and the second reaction zone is maintained at a temperature at which virtually no decomposition of the

radical polymerization initiator occurs within the time during which the initiator passes through the second reaction zone.

Claim 13 (Previously presented): The method for producing a radical polymer according to claim 11, wherein the reaction tube has a first reaction zone located on a radical polymerization initiator and radical-polymerizable monomer inlet side, and a second reaction zone located on a polymer liquid outlet side; the first reaction zone is maintained at a temperature at which the radical polymerization initiator decomposes; and the second reaction zone is maintained at a temperature at which virtually no decomposition of the radical polymerization initiator occurs within the time during which the initiator passes through the second reaction zone.

Claim 14 (Canceled).